

APR/FY06

FORT RUCKER
Alabama

**Army Defense Environmental
Restoration Program
Installation Action Plan**

Final 31 August 2006

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Statement of Purpose

The purpose of the Installation Action Plan (IAP) is to outline the total multi-year Cleanup Program for an installation. The plan identifies environmental cleanup requirements at each site or area of concern, and proposes a comprehensive, installation-wide approach, with associated costs and schedules, to conduct investigations, and necessary remedial actions.

In an effort to coordinate planning information between the restoration manager, U.S. Army Environmental Center (USAEC), Fort Rucker, executing agencies, regulatory agencies, and the public, an IAP was completed. The IAP is used to track requirements, schedules and tentative budgets for all major Army installation cleanup programs.

All site specific funding and schedule information has been prepared according to projected overall Army funding levels and is therefore subject to change. Under current project funding, all remedies will be in place at Fort Rucker by the end of 2007.

The following agencies contributed to the formulation and completion of this 2006 Installation Action Plan for Fort Rucker:

Engineering & Environment Inc. for USAEC

US Army Environmental Center

Fort Rucker

Acronyms & Abbreviations

AEC	Army Environmental Center
AEDB-R	Army Environmental Data Base - Restoration
AOC	Area of Concern
ASP	Ammunition Supply Point
BHHERA	Baseline Human Health and Ecological Risk Assessment
BRAC	Base Realignment and Closure
BTEX	Benzene, Toluene, Ethylbenzene, and Xylene
CA	Corrective Action
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act of 1980
CMB	Compliance Management Branch
CMS	Corrective Measure Study
CS	Confirmatory Sampling
CTC	Cost to Complete
CY	Cubic Yards
DA	Department of Army
DD	Decision Document
DEH	Directorate of Engineering and Housing
DERA	Defense Environmental Restoration Account
DERP	Defense Environmental Restoration Program
DMM	Discarded Military Munitions
DOD	Department of Defense
DOL	Directorate of Logistics
DSERTS	Defense Site Environmental Restoration Tracking System
ENRMD	Environmental and Natural Resources Management Division
EOD	Explosive Ordnance Disposal
EPA	Environmental Protection Agency (United States)
ER,A	Environmental Restoration, Army (Formerly DERA)
FORSCOM	U.S. Army Forces Command
FS	Feasibility Study
FUDS	Formerly Used Defense Sites
FY	Fiscal Year
GSA	General Services Administration
GWM	Groundwater Monitoring
HSWA	Hazardous and Solid Waste Amendment
IAP	Installation Action Plan
IMA	Installation Management Agency
IRA	Interim Remedial Action
IRP	Installation Restoration Program
IUA	Intensive Use Area
JRTC	Joint Readiness Training Center
LTM	Long Term Management
LUA	Limited Use Area
MACOM	Major Army Command
MMRP	Military Munitions Response Program
MO-(1-3)	Management Option (1-3)

Acronyms & Abbreviations

MOGAS	Motor Gasoline
NE	Not Evaluated
NFA-ATT	No Further Action-At This Time
NPL	National Priorities List
OB/OD	Open Burning/Open Detonation
OE	Ordnance or Explosives
PA	Preliminary Assessment
PBC	Performance Based Contract
PCB	Polychlorinated Biphenyls
POL	Petroleum, Oil and Lubricants
PPB	Parts Per Billion
PPM	Parts Per Million
PY	Prior Year
RA	Remedial Action
RAC	Risk Assessment Code
RA(C)	Remedial Action - Construction
RA(O)	Remedial Action - Operation
RAB	Restoration Advisory Board
RC	Response Complete
RCRA	Resource Conservation and Recovery Act
RD	Remedial Design
RECAP	Risk Evaluation/Corrective Action Program
REM	Removal
RFA	RCRA Facility Assessment
RFI	RCRA Facility Investigation
RI	Remedial Investigation
RIP	Remedy in Place
ROD	Record of Decision
RRSE	Relative Risk Site Evaluation
S&R	Supervision and Remediation
SAP	Satellite Accumulation Point
SI	Site Inspection or Site Investigation
SUPA	Special Use Permit Authorization
SWMU	Solid Waste Management Unit
TPH	Total Petroleum Hydrocarbons
TRADOC	Training and Doctrine Command
TRC	Technical Review Committee
USACE	United States Army Corps of Engineers
USAEHA	United States Army Environmental Hygiene Agency
USAF	United States Air Force
USATHMA	U S Army Toxic and Hazardous Material Agency (replaced by AEC)
USFS	United States Forest Service
UST	Underground Storage Tank
UXO	Unexploded Ordnance
VOC	Volatile Organic Compounds
yr	year

Installation Locale:

- Daleville, Dale and Coffee Counties, Alabama.
- Fort Rucker is located in southeast Alabama approximately 20 miles northwest of the city of Dothan.
- 62,430 acres in size (57,885 acres at the main installation and 4,545 acres of satellite airfields and leases and easements).

Installation Mission: In 1973, Fort Rucker became the center for all U.S. Army aviation flight training. Since then, its mission has been to maintain and operate facilities and provide services and material to support the helicopter pilot training for the Army.

In addition to Fort Rucker's role as the Army's Aviation Center, it houses several tenant activities and directorates. Fort Rucker is the home for the Army Safety Center, the U.S. Army Aviation Development Test Activity, the Aeromedical Center and Aeromedical Research Laboratory, and a Human Engineering Laboratory.

Lead Organization:

Installation Management Agency, Southeast Region

Leading Executing Agency: US Army Corps of Engineers – Mobile District

Regulatory Participation:

Federal: U.S. Environmental Protection Agency, Region IV, RCRA and Federal Facilities Branch, Waste Management Division.

State: Alabama Department of Environmental Management.

National Priorities List (NPL) Status: Non-NPL with RCRA Corrective Action.

Installation Restoration Advisory Board (RAB)/Technical Review Committee (TRC)/Technical Assistance for Public Participation (TAPP) Status:

Three notices were placed in local newspapers to solicit interest in establishing a Restoration Advisory Board (RAB). The notices informed the public of the role of the RABs and gave a window of opportunity to reply within 30 days. No public interest was expressed at that time.

Program Summaries:

IRP

Primary Contaminants of Concern: VOCs, Chlorinated Solvents, Metals

Affected Media of Concern: Soil, Groundwater, Surface Water

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC: 2015+

Funding to date (up to FY05): \$13,737.3K

Current year funding (FY06): \$ 421K

Cost-to-Complete (FY07+): \$ 1,856K

MMRP

Primary Contaminants of Concern: UXO

Affected Media of Concern: Groundwater, Soil, Surface Water

Estimated Date for Remedy-In-Place (RIP)/Response Complete (RC: 2015+

Funding to date (up to FY05): \$ 425.5K

Current year funding (FY06): \$ 0

Cost-to-Complete (FY07+): \$1,909.0K

Cleanup Program Summary

Installation Historic Activity:

Fort Rucker was activated on May 1, 1942, as the Ozark Triangular Division Camp, in response to U.S. Military escalation following Pearl Harbor. In June of 1943, the facility was renamed to Camp Rucker, in honor of General Edmund Winchester Rucker.

Until 1946, Camp Rucker served as an infantry training ground and housed artillery, tank, anti-aircraft, medical, and quartermaster troops. Following VE Day in May 1945, the camp became an Infantry replacement Training Center and later an Infantry Advanced Replaced Training Center.

The successful utilization of helicopters in Korea had caused a pressing need for testing and training in the maintenance and operation of rotary-wing aircraft. The Army established an aviation center and school to meet the need. The existing Army Aviation School of Ft. Sill, Oklahoma, was relocated to Camp Rucker. In March of 1955, Camp Rucker was officially designated as the U.S. Army Aviation Center (USAAVNC). In October of the same year, it became a permanent U.S. military fort, and, consequently, was renamed Fort Rucker.

In 1973, Fort Rucker became the center for all U.S. Army aviation flight training. Since then, its mission has been to maintain and operate facilities and provide services and material to support the helicopter pilot training for the Army.

In addition to Fort Rucker's role as the Army's Aviation Center, it houses several tenant activities and directorates. Fort Rucker is the home for the Army Safety Center, the U.S. Army Aviation Development Test Activity, the Aeromedical Center and Aeromedical Research Laboratory, and a Human Engineering Laboratory.

Three notices were placed in local newspapers to solicit interest in establishing a Restoration Advisory Board (RAB). The notices informed the public of the role of the RABs and gave a window of opportunity to reply of 30 days. At the end of the 30 day comment period, no replies were received from the Public.

Program Progress:

IRP

- Prior Year Progress: All sites are under PBC at this time. SWMU 2D has been capped.
- Future Plan of Action: Sampling will continue on SWMUs 4, 10, 14, 15, and 2D. Remedial action is planned at SWMU 8.

MMRP

- Prior Year Progress: The Contractor has submitted the final Site Inspection report.
- Future Plan of Action: UXO, soil removal, and institutional controls

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Installation Restoration Program

Total AEDB-R IRP Sites / AEDB-R sites with Response Complete: 114/113

Different Site Types:

2 Burn Areas	1 Fire/Crash Training Area
1 Contaminated Soil Pile	2 Disposal Pit/Dry Wells
1 Dip Tank	2 Incinerators
15 Landfills	23 Oil Water Separators
24 Storage Areas	3 Surface Impoundment/Lagoons
1 Sewage Treatment Plant	7 Above Ground Storage Tanks
20 Underground Storage Tanks	1 Radioactive Waste Area
3 Waste Treatment Plants	1 Other
3 Unexploded Munitions/Ordnance	

Most Widespread Contaminants of Concern: POL, Metals

Media of Concern: Groundwater, Soil, Surface Water

Completed Removal (REM)/Interim Remedial Action (IRA)/Remedial Action (RA):

- FTRU-010, -040, -041, -042, -051, -052, -070, -071, -073, -080, -082, -101, -109, -115, -157, -158, -161, -162, -165, -179
- UST Removals in 1992, 1993, 1994, 1995

Total IRP Funding

Prior years (up to FY05):	\$ 13,737.3K
Current year funding (FY06):	\$ 421.0K
Future Requirements (FY07+):	\$ 1,856.0K
Total:	\$ 16,014.3K

Duration of IRP

Year of IRP Inception: 1988

Year of IRP RIP/RC: 2007

Year of IRP Completion including Long-Term Management (LTM): 203507

IRP Contamination Assessment Overview

The Fort Rucker Installation Restoration Program identified 111 sites in 1988. Forty-four of these sites required further investigation, which was initiated in 1990. As a result of site investigations, recommendations and studies of these sites, the following is a summary of the IRP initiatives for: no further action, removals and corrective measures study.

1. All the sites at Fort Rucker scored low because the primary contaminant was petroleum hydrocarbons.
2. None of the sites contamination has migrated off-post.
3. None of the sites has extensive groundwater contamination.
4. 108 sites have been evaluated by the state regulators and granted NFA status.

Note: These are listed on Table III.2 of permit.

5. 4 sites (SWMUs 4, 10 14, and 15) require LTM. One site requires removal (SWMU 8), and a cap was installed at SWMU 2D and is awaiting ADEM approval.

The IR Program at Fort Rucker has a reasonable expectation of declaring a large percentage of its sites RC in the near future.

IRP Cleanup Exit Strategy

Remaining cleanup requirements are being addressed under a single performance based fixed price contract through FY10. All sites will be remedy in place by July 2007.

Remaining remedial operations and long term management are expected to be completed by 2015.

1960

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1979

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- Final, Status Report and Respiration Testing, Bldg 2077, ENSR
- Final, Status Report and Respiration Testing, Bldgs 1002, 1168 and 2250, ENSR
- Technical Memorandum, Summer 2003 Sampling Data Report, OU3, FES
- 2003 Fall Groundwater Sampling Event OU3 EDF files, EDMS files, FES
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1984

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- U.S. Army Environmental Hygiene Agency, 1984, Evaluation of Washrack Leachate, Fort Rucker, Alabama, Hazardous Waste Study No. 37-26-0458-85, Aberdeen Proving Ground, Maryland.
- U.S. Geological Survey (Scott, John C.; Law, Linda R.; and Cobb, Riley H.), 1984, Hydrology of the Tertiary-Cretaceous Aquifer System in the Vicinity of Fort Rucker Aviation Center, Alabama, U.S. Geological Survey Water Resources Report 84-4118.
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- Final, Status Report and Respiration Testing, Bldg 2077, ENSR
- Final, Status Report and Respiration Testing, Bldgs 1002, 1168 and 2250, ENSR
- Technical Memorandum, Summer 2003 Sampling Data Report, OU3, FES
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- Tech Memo: Sampling Data Report OU3 2004 Winter Groundwater Sampling Event, FES
- Tech Memo: Sampling Data Report OU3 2004 Winter Groundwater Sampling Event EDF and Draft EDMS, FES
- U.S. Army Environmental Hygiene Agency, **1987**, Geohydrogeologic Study at Fort Rucker, TAC-Runkle Landfill and Dilly Branch Landfills, Aberdeen Proving Ground, Maryland.

1988

- U.S. Geological Survey (Scott, John C. and Cobb, Riley H.), **1988**, Geohydrology Susceptibility of Major Aquifers to Surface Contamination in Alabama, Area 12, U. S. Geological Survey Water Resources Investigations Report 88-4078.
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1992

- U.S. Army Corps of Engineers, Toxic and Hazardous Materials Agency, **January 1992**, Preliminary Site Inspection for Fort Rucker Military Reservation, Site Inspection Report No. 91030, U.S. Army Corps of Engineers Toxic and Hazardous Materials Agency. Aberdeen Proving Ground, MD.
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1996

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1997

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- U.S. Army Environmental Center (Metcalf & Eddy, Inc.), **July 1997**, Final Corrective Measures Study, Fort Rucker, Alabama.

1998

- Environmental Chemical Corporation—Contract No. DACW01-95-D-0033, DO 014, **August 1998**, Final Report—Interim Soil Removal at SWMU 15, Fire Fighting Training Area and Removal of Contaminated Soils at CAMU 2-7, Fort Rucker, AL, Mobile District Corps of Engineers, 109 St. Joseph St. Mobile, AL 36602.

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Installation Restoration Program

Site Descriptions

CLOSED SANITARY LANDFILL, SWMU 2D FTRU-171

SITE DESCRIPTION

The site was a landfill located at the southeast corner of Hatch and Engineer Road in the southeastern area of the installation. This trench and fill landfill was approximately 40+ acres in size and was operated from approximately 1950 to the early 1980s. The landfill was used for the disposal of a wide variety of materials. The west half of the site was backfilled with clean fill and pine trees were planted. The east half was closed and backfilled with clean fill.

Groundwater monitoring wells were installed at various times throughout the life of the landfill. It was during this monitoring that contamination above MCLs was detected in several wells. In June 1999, ADEM required the installation to prepare a Groundwater Corrective Action Plan (CAP). As a result of the CAP, 16 groundwater monitoring wells were installed to delineate the extent of contamination. Preliminary analytical data collected indicated the presence of chlorinated solvents, VOCs, and metals. At this time it appears that the contamination could be migrating from the site. Preliminary data suggested the need for additional groundwater monitoring wells to further delineate the plume. Additional monitoring wells were installed in January 2001.

In FY06, 3 new AOCs were identified by the State; AOC P, Q, and R. Installation of monitoring wells and confirmatory sampling was performed in FY06 under the PBC contract. State approval of NFA for these 3 AOCs is expected this FY.

CLEANUP STRATEGY

A RCRA constructed cap covers the entire site. Long term maintenance will include erosion control as well as state required monitoring.

Installation wide PBC contract was awarded Aug 2004 for all remaining IRP investigation and cleanup at Ft. Rucker to include all LTO and LTM requirements. All costs for operations at Ft. Rucker are being tracked under FTRU-171. Long Term Monitoring and Operations at this site are continuing, and the costs associated with these operations are tracked under FTRU-171.

STATUS

REGULATORY DRIVER: CERCLA

RRRSE: High

CONTAMINANTS OF CONCERN:

VOC, Chlorinated Solvents, Metals

MEDIA OF CONCERN:

Soil, Groundwater

PHASES	Start	End
PA.....	198202	198611
SI.....	199908	200109
RI/FS	200106	200512
RD	200310	200512
RA(C)	200407	200706
RA(O)	200407	201007
LTM	201007	203507

RIP: 200706

RC: 201007

IRP No Further Action Sites Summary

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTRU-001	Landfill South of Old Hospital SWMU 2A	Study Complete, No Cleanup Required	198611
FTRU-002	Landfill North of Aeromed Res. Bldg SWMU 3	Study Complete, No Cleanup Required	200109
FTRU-003	Landfill SW Corner Red Cloud/Copter Rd SWMU 6	Study Complete, No Cleanup Required	200306
FTRU-004	Landfill Property Disposal Yard SWMU 7	Study Complete, No Cleanup Required	199410
FTRU-005	Landfill S Of Engr Rd & N Of Resv Bndry, SWMU 8	Study Complete, No Cleanup Required	200306
FTRU-006	Landfill South of Castle Rd & North of Boundary SWMU 9	Study Complete, No Cleanup Required	199602
FTRU-007	Landfill South of Dilly Br/North of Castle Rd SWMU 11	Study Complete, No Cleanup Required	199602
FTRU-008	Landfill N Of Dilly Br Rd/E Of Test Std, SWMU 10	Study Complete, No Cleanup Required	199709
FTRU-009	Landfill Near Entrance Storage Yard SWMU 2B	Study Complete, No Cleanup Required	198611
FTRU-010	S; Hatch Road Near Lake SWMU 2C	Study Complete, No Cleanup Required	199812
FTRU-011	Landfill Gully on Airport Rd/NearSH95 SWMU 13	All Required Cleanup Completed	198611
FTRU-012	Landfill Ozark City Leasee, SWMU 4	Study Complete, No Cleanup Required	200109
FTRU-013	Construction Debris Landfill SWMU 1	Study Complete, No Cleanup Required	198611
FTRU-014	Municipal Waste Incinerator SWMU 22	Study Complete, No Cleanup Required	198611
FTRU-015	Hospital Incinerator SWMU 23	Study Complete, No Cleanup Required	198611
FTRU-020	Main Post Landfill SWMU5	Study Complete, No Cleanup Required	198611
FTRU-022	Present Ammo Insp. Pit Burn Trench SWMU 66	Study Complete, No Cleanup Required	198611
FTRU-023	Former Ammo Insp. Pit Burn Trench SWMU 67	Study Complete, No Cleanup Required	198611
FTRU-030	Wastewater Treatment Plant SWMU 20	Study Complete, No Cleanup Required	198611
FTRU-031	Hatchery Army Heliport Strip (Lagoon) SWMU 16	Study Complete, No Cleanup Required	198611
FTRU-032	Knox Army Heliport Strip (Lagoon) SWMU 17	Study Complete, No Cleanup Required	198611

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTRU-033	Lowe Wastewater Pretreatment (CRREDX) Plant SWMU 19	Study Complete, No Cleanup Required	198611
FTRU-034	Cairns Ahp Sewage Treatment Plant SWMU 21	Study Complete, No Cleanup Required	198611
FTRU-040	Waste POL Disposal, SWMU 14	All Required Cleanup Completed	200109
FTRU-041	Storage Waste POL – 10K Gal. RR Tank SWMU 27	All Required Cleanup Completed	199803
FTRU-042	Storage Waste POL (10K Gal RR Tank) SWMU 28	All Required Cleanup Completed	199803
FTRU-043	Storage Waste POL (10K Gal UST) SWMU 29	Study Complete, No Cleanup Required	198611
FTRU-044	Storage Waste POL (10K Gal UST) SWMU 30	Study Complete, No Cleanup Required	198611
FTRU-045	Storage Waste POL (10K Gal UST) SWMU 31	All Required Cleanup Completed	199809
FTRU-046	Waste POL (UST) (Bldg 4701) 2 Ea SWMU 32AB	Study Complete, No Cleanup Required	198611
FTRU-047	Waste Oil (UST)(Bldg 6021) SWMU 33AB	Study Complete, No Cleanup Required	198611
FTRU-048	Waste POL (UST)(Bldg 311) SWMU 34 AB	Study Complete, No Cleanup Required	198611
FTRU-049	Waste POL (UST)(Bldg 1102) SWMU 35	Study Complete, No Cleanup Required	198611
FTRU-050	Waste POL (UST)(Bldg 1013) SWMU 36	Study Complete, No Cleanup Required	198611
FTRU-051	Firefighting Training Area, SWMU 15	All Required Cleanup Completed	199812
FTRU-052	Waste Fuel Storage SW Dill Br Rd & Ave F SWMU 63	All Required Cleanup Completed	199803
FTRU-070	Pesticide Storage /Handling (Bldg 1476) SWMU 49	All Required Cleanup Completed	200309
FTRU-071	Pesticide Storage/Handling (Bldg 1424) SWMU 48	All Required Cleanup Completed	199712
FTRU-073	Herbicide Storage (Bldg 1448) SWMU 50	All Required Cleanup Completed	200309
FTRU-075	Pesticide/Herbicide Storage (Bldg 20023) SWMU 51	Study Complete, No Cleanup Required	199602
FTRU-079	Washrack W/O Water Separator (Bldg 1436) SWMU 80	Study Complete, No Cleanup Required	199602
FTRU-080	Washrack W/O Water Separator(Lowe AHP) SWMU 71	All Required Cleanup Completed	199803

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTRU-081	Washrack W/O Water Separator (Bldg 6035) SWMU 72	Study Complete, No Cleanup Required	199410
FTRU-082	Washrack W/O Water Separator (Bldg 1412) SWMU 73	All Required Cleanup Completed	199803
FTRU-083	Washrack W/O Water Separator (Alng Area) SWMU 74	Study Complete, No Cleanup Required	199410
FTRU-084	Washrack W/O Water Separator (4000 Block) SWMU 75	Study Complete, No Cleanup Required	198611
FTRU-085	Washrack W/O Water Separator (11 th & 2 nd Ave) SWMU 76	Study Complete, No Cleanup Required	198611
FTRU-086	Washrack W/O Water Separator (Fire Station) SWMU 77	Study Complete, No Cleanup Required	198611
FTRU-087	Washrack W/O Water Separator (Bldg 405) SWMU 78	Study Complete, No Cleanup Required	198611
FTRU-088	Washrack W/O Water Separator (Bldg 708) SWMU 79	Study Complete, No Cleanup Required	198611
FTRU-089	Washrack W/O Water Separator (Bldg 706) SWMU 92	Study Complete, No Cleanup Required	198611
FTRU-090	Washrack W/O Water Separator (Bldg 709) SWMU 91	Study Complete, No Cleanup Required	198611
FTRU-091	Washrack W/O Water Separator (Bldg 1406) SWMU 89	Study Complete, No Cleanup Required	198611
FTRU-092	Washrack W/O Water Separator (Bldg 1416) SWMU 81	Study Complete, No Cleanup Required	198611
FTRU-093	Washrack W/O Water Separator (Bldg 4710) SWMU 82	Study Complete, No Cleanup Required	198611
FTRU-094	Washrack W/O Water Separator (Bldg 25104) SWMU 83	Study Complete, No Cleanup Required	198611
FTRU-095	Washrack W/O Water Separator (Bldg 50201) SWMU 85	Study Complete, No Cleanup Required	198611

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTRU-096	Washrack W/O Water Separator (Bldg 30306) SWMU 86	Study Complete, No Cleanup Required	198611
FTRU-097	Washrack W/O Water Separator (Bldg 30301) SWMU 87	Study Complete, No Cleanup Required	198611
FTRU-098	Washrack W/O Water Separator (Bldg 50201) SWMU 84	Study Complete, No Cleanup Required	198611
FTRU-099	Washrack W/O Water Separator (Bldg 30125) SWMU 88	Study Complete, No Cleanup Required	198611
FTRU-100	Washrack W/O Water Separator (Bldg 60115) SWMU 90	Study Complete, No Cleanup Required	198611
FTRU-101	Sump Drainage System-POL Shop SWMU 70	All Required Cleanup Completed	199803
FTRU-102	Radiological Waste Storage (Bldg 1314) SWMU 58	Study Complete, No Cleanup Required	198611
FTRU-109	Material Storage (Bldg 6015) SWMU K	All Required Cleanup Completed	199803
FTRU-110	Former Haz Waste Storage Area SWMU 61	Study Complete, No Cleanup Required	199410
FTRU-112	Haz Waste Storage Area Bldg 427 SWMU 56	Study Complete, No Cleanup Required	198611
FTRU-113	Material Storage Yard (1200 Area) SWMU 59	Study Complete, No Cleanup Required	198611
FTRU-114	Photographic Lab (Bldg 1109) SWMU 57	Study Complete, No Cleanup Required	198611
FTRU-115	New PCB Mtr Storage (Engr & Dilly Br) SWMU J	All Required Cleanup Completed	199803
FTRU-116	Former Waste PCB Storage (DPDO 113) SWMU 55	Study Complete, No Cleanup Required	199602
FTRU-117	Former Waste BCP Storage (Lumber Yard) SWMU 54	Study Complete, No Cleanup Required	199602
FTRU-119	Acid Pit B/T Bldg 6015 & 6016 SWMU 68	Study Complete, No Cleanup Required	199410
FTRU-120	Storm Drain Outlets, Waste Storage Area SWMU 60	Study Complete, No Cleanup Required	199410
FTRU-150	Waste Oil (500 Gal Tank)(Bldg 405) SWMU C	Study Complete, No Cleanup Required	198611
FTRU-151	Waste Oil (500 Gal AST) (Bldg 702) SWMU 38	Study Complete, No Cleanup Required	198611
FTRU-152	Former PCB Storage Area SWMU 53	Study Complete, No Cleanup Required	198611

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTRU-153	Waste Oil (1000 Gal)(Bldg 1406) SWMU 7044	Study Complete, No Cleanup Required	198611
FTRU-154	PCB Storage Area SWMU 52	Study Complete, No Cleanup Required	198611
FTRU-156	VMS Waste POL, UST SWMU 37	Study Complete, No Cleanup Required	198611
FTRU-157	Area of Oil Spill SWMU L	Study Complete, No Cleanup Required	199410
FTRU-158	Waste Oil (55 Gal Drums) (Bldg 4004) SWMU 64	All Required Cleanup Completed	199803
FTRU-159	Waste Oil (200 Gal UST)(Bldg 4004) SWMU 45	Study Complete, No Cleanup Required	198611
FTRU-160	Waste Oil (500 Gal AST)(Bldg 4710) SWMU 39	Study Complete, No Cleanup Required	198611
FTRU-161	Demolished Vehicle Storage Yard SWMU 62	Study Complete, No Cleanup Required	199410
FTRU-162	Spent Battery Storage, Bldg 6015 SWMU 41B	All Required Cleanup Completed	199803
FTRU-163	Waste Oil (UST) (Bldg 5410) SWMU 46	Study Complete, No Cleanup Required	198611
FTRU-164	Old Dismantled Incinerator SWMU 24, 25,26	All Required Cleanup Completed	198611
FTRU-165	Waste Oil (AST)(Bldg 6015) SWMU 41A	Study Complete, No Cleanup Required	199803
FTRU-166	Waste Oil (200 Gal UST)(Bldg 8304) SWMU 40A	Study Complete, No Cleanup Required	198611
FTRU-167	Waste Oil (50K Gal UST)(Bldg 8303) SWMU 40B	Study Complete, No Cleanup Required	198611
FTRU-168	Empty 50K Gallon Tank SWMU A	Study Complete, No Cleanup Required	198611
FTRU-169	8-Bravo EOD Range SWMU 65	Study Complete, No Cleanup Required	198611
FTRU-170	Waste Oil (UST)(Along Site) SWMU 2D	Study Complete, No Cleanup Required	198611
FTRU-172	Diesel (UST) SWMU H	Study Complete, No Cleanup Required	198611
FTRU-173	Unknown UST – Lowe AHP SWMU 1	Study Complete, No Cleanup Required	198611
FTRU-174	Oil Gas Station Site, UST SWMU E	Study Complete, No Cleanup Required	198611
FTRU-175	Old Gas Station Site, UST SWMU F	Study Complete, No Cleanup Required	198611
FTRU-176	Inactive Construction Debris Landfill SWMU 12	Study Complete, No Cleanup Required	198611
FTRU-177	Main Sewage Treatment Plant SWMU 18	Study Complete, No Cleanup Required	198611

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTRU-178	VMS, Waste POL, UST SWMU 42	Study Complete, No Cleanup Required	198611
FTRU-179	Product Storage Area, SWMU D	All Required Cleanup Completed	199808
FTRU-180	Former Haz Material Drum Storage SWMU G	Study Complete, No Cleanup Required	199602
FTRU-181	PCP Dip Tank SWMU 69	Study Complete, No Cleanup Required	199602
FTRU-182	Bldg 81, Refueling Point	All Required Cleanup Completed	199607
FTRU-183	Contaminated Soil, Tank Hill	All Required Cleanup Completed	199701

Initiation of IRP:

Draft Corrective Measures Study (CMS) Work Plans were submitted to Region IV EPA for review and comment on 4 November 1992. Comments to the draft work plans were delivered to the Army in April 1993 and a meeting to discuss these comments was held in May 1993. A Corrective Action Management Plan (CAMP) was also prepared by the Army, detailing the schedules for each action proposed (i.e., removal, CMS/RFI). The work plans were approved by the EPA in September 1993, and fieldwork in support of the work plans began 45 days after regulator approval of the CAMP and Final Work Plans. The schedule for IRP actions is subject to change, since according to the Federal Facility Agreement (FFA) signed between Region IV EPA and Fort Rucker, there are no specified deadlines imposed on the regulatory community for reviewing and commenting on documents, and this greatly impacts schedules. The Draft Phase II RFI report was submitted for Region IV EPA and ADEM review on September 15, 1994. The Army received approval to this report from Region IV EPA. The Corrective Measures Study (CMS) was completed and a draft report submitted for review in June 1996. Approval was received from both the State and Region IV EPA in FY 1998. See schedule below.

Past Phase Completion Milestones

1988

- RCRA Facility Assessment, EPA Region IV, September

1990

- RFI Award, September

1993

- RFI Phase I, Nov

1993

- RFI Phase II Initiated, Nov

1996

- RFI Phase II Completion, February

1996

- CMS Initiated, January

1996

- Design Complete for Removal Sites, December

1997

- CMS Completion, June

1997

- Natural Attenuation/Monitoring Start, October

1998

- Final CMS Study Approved (ADEM/EPA), January

Phase Completion Milestones: Removals Completed (15 sites)* Jul 2007

Projected Record of Decision (ROD)/Decision Document (DD) Approval Dates:
Unknown

Schedule for Next Five-Year Review: N/A

Estimated Completion Date of IRP (including LTM phase): 2035

***Note:** Removals completion date delayed to 2008 due to the low Relative Risk Score according to Department of Defense's (DoD's) Defense Planning Guidance (DPG)

Fort Rucker IRP Schedule

(Based on current funding constraints)

AEDB-R#	PHASE	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
FTRU-171	RA(O)									203507

Note: All Long Term Monitoring sites are included in FTRU-171

Prior Years Funds

Total Funding up to FY04: \$13,203K

Year	Site Information	Expenditures	FY Total
FY05	FTRU-171 RI	\$61.6K	
	RA(C)	\$472.7K	\$534.3K

Total Prior Year Funding: \$13,737.3K

Current Year Requirements

Year	Site Information	Expenditures	FY Total
FY06	FTRU-171 RA(C)	226K	
	RA(O)	195K	\$421K

Total Future Requirements: \$ 1,856K

Total IR Program Cost (from inception to completion of the IRP): \$ 16,014.3K

FORT RUCKER

Military Munitions Response Program

MMRP Summary

Total AEDB-R MMRP Sites/AEDB-R sites with Response Complete: 7/4

AEDB-R Site Types

2 Firing Ranges
3 Unexploded Munitions/Ordnance

Most Widespread Contaminants of Concern: UXO, Metals

Media of Concern: Groundwater, Soil

Completed REM/IRA/RA: Not available

Total MMRP Funding

Prior years (up to FY05):	\$ 425,487
Current Year (FY06):	\$ 0
Future Requirements (FY07+):	\$ 1,909,000
Total:	\$ 2,324,487

Duration of MMRP

Year of MMRP Inception: 1982
Year of MMRP RIP/RC: 2015
Year of MMRP Completion Including LTM: 2046

MMRP Contamination Assessment

MMRP Contamination Assessment Overview

The Department of Defense (DoD) has established the MMRP under Defense Environmental Restoration Program (DERP) to address DoD sites with MEC including unexploded ordnance (UXO), discarded military munitions (DMM), and MC.

The MMRP eligible sites include other than operational ranges where UXO, DMM and MC is known or suspected and the release occurred prior to September 30, 2002. Properties classified as operational ranges are not eligible and, therefore, are excluded from the MMRP program.

The process began with three phases of range inventories. Phase 1 consisted of installations completing an initial data call. USAEC managed the implementation Phases 2 and 3 of the MMRP inventory.

The Phase II inventory dealt with active and inactive (A/I) range considerations. Phase 3 involved the Closed, Transferring, and Transferred (CTT) range inventory conducted in 2002. Included were extensive mapping, data collection for upload to the Army Range Inventory Database, conducting of an assessment on explosives safety risk using the Risk Assessment Code (RAC) methodology for CTT ranges or sites with UXO or DMM identified in the inventory, and the determination of which sites on the inventory potentially qualify for the MMRP.

The United States Army's inventory of CTT ranges and sites has identified seven sites eligible for action under MMRP at Fort Rucker. Site Investigations have been conducted, and four of these sites are Response Complete.

MMRP Cleanup Exit Strategy

Currently waiting for the State's concurrence on site Investigations prior to conducting the RI/FS. Additional investigation is planned and it is likely that UXO and soil removal will be required followed by institutional controls.

2002

- CTT Range Inventory

FORT RUCKER

Military Munitions Response Program

Site Descriptions

FTRU-001-R-01

ANTI-TANK ROCKET/GRENADE RANGE

SITE DESCRIPTION

The Anti-Tank Rocket/Grenade Range is located northeast of the cantonment area and occupies ~57 Acres. The area has been developed and is currently utilized as a portion of the installation golf course.

CLEANUP STRATEGY

Additional investigation is planned. UXO and soil removal followed by institutional controls is planned.

STATUS

REGULATORY DRIVER: CERCLA

RAC: (2) Serious

CONTAMINANTS OF CONCERN:
UXO

MEDIA OF CONCERN:
Soil

PHASES	Start	End
PA.....	200202	200305
SI	200309	200510
RI/FS	200710	200909
RD	201410	201509
RA(C).....	201510	201609
LTM	201610	204609

RC: 201609

FTRU-003-R-01

INFILTRATION/GRENADE RANGE

SITE DESCRIPTION

This site was added in FY05 based on the results of the SI for Ft. Rucker. The Infiltration/Grenade Range is adjacent to, but not contiguous with, the Anti-Tank Rocket/Grenade Range. Much of the former range area is currently used as a golf driving range and occupies approximately 44 acres of other than operational range designated area. A previous estimate of the area covered by this site (76.3 acres) was shown to be incorrect. This previous estimate did not take into account overlapping portions of the individual ranges. The range is made up of three distinct sub-sites, including: Infiltration Range No. 2, Grenade Range No. 1, and the Rifle Grenade Fragmentation Range.

Approximately 33.7 acres of the former range area consists of mowed and maintained grassy areas that are used as a driving range and as part of the Equestrian Center. The remainder of the range area (approximately 10.3 acres) is wooded. The wooded areas are generally relatively thick with meandering horse trails. Most of the ground surface in the wooded areas is covered with leaf or pine needle litter.

STATUS

REGULATORY DRIVER: CERCLA

RAC: (2) Serious

CONTAMINANTS OF CONCERN:
UXO

MEDIA OF CONCERN:
Soil

PHASES	Start	End
PA.....	200202	200305
SI.....	200309	200510
RI/FS	200910	201009
RD	201410	201509
RA(C)	201510	201609
LTM	201610	204609

RC: 201609

CLEANUP STRATEGY

Additional investigation is planned. UXO removal is expected.

FTRU-004-R-01

.22 CALIBER TARGET BUTT

SITE DESCRIPTION

The former .22 Caliber Target Butt covers approximately 2.4 acres and is located in a central portion of the cantonment area. Most of the area is heavily wooded with thick undergrowth. A closed improved dirt road and cleared overhead power line right-of-way cut east to west through the northern and southern portions of the area, respectively. Running trails with exercise stations also pass through various portions of the area. The only evidence of the existence of the .22 Caliber Target Butt was found on a 1944 installation map. Installation personnel have no information about this range, and no other supporting documentation was found. Range-specific usage dates are not available; however, maps from 1951 and 1952 display the site as a golf course, so it is possible the .22 Caliber Target Butt was used as a range for the duration of WWII. Information regarding the frequency of use was not available. It is assumed training occurred year round.

STATUS

REGULATORY DRIVER: CERCLA

RAC: Low

CONTAMINANTS OF CONCERN:
UXO

MEDIA OF CONCERN:
Soil

PHASES	Start	End
PA	200202	200305
SI	200309	200510
RI/FS	200910	201009

RC: 201009

CLEANUP STRATEGY

Additional investigation is planned. No removal action is expected.

MMRP No Further Action Sites Summary

AEDB-R #	Site Title	Documentation/Reason for NFA	NFA Date
FTRU-002-R-01	Lake Tholocco Pistol Range	Not eligible for ER,A/BRAC Funding	200503
FTRU-005-R-01	A-Grenade and Bayonet Court	Study Complete, No Cleanup Required	200506
FTRU-006-R-01	B-Grenade and Bayonet Court	Study Complete, No Cleanup Required	200506
FTRU-007-R-01	C-Grenade and Bayonet Court	Study Complete, No Cleanup Required	200506

MMRP Schedule

Initiation of MMRP: 2002

Past Phase Completion Milestones

Projected ROD/DD Approval Dates: Unknown

Projected Construction Completion: 2016

Schedule for Five Year Reviews: N/A

Estimated Completion Date of MMRP including LTM: 2046

Fort Rucker MMRP Schedule

(Based on current funding constraints)

AEDB-R#	PHASE	FY07	FY08	FY09	FY10	FY11	FY12	FY13	FY14	FY15+
FTRU-001-R-01	RIFS									
	RD									201509
	RA(C)									201609
	LTM									204609
FTRU-003-R-01	RIFS									
	RD									201509
	RA(C)									201609
	LTM									204609
FTRU-004-R-01	RIFS									

Prior Years Funds**Total funding up to FY04: \$ 416,115**

Year	Site Information	Expenditures	FY Total
FY05	SI		\$ 9,372

Total Prior Year Funds: \$425,487***Current Year Requirements***

Year	Site Information	Expenditures	FY Total
FY06			0

Total Future Requirements: \$ 1,909K**Total MMR Program Cost (from inception to completion of the MMRP): \$ 2,324.5K**

Three notices were placed in local newspapers to solicit interest in establishing a Restoration Advisory Board (RAB). The notices informed the public of the role of the RABs and gave a window of opportunity to reply within 30 days. No public interest was expressed at that time.